

SUPPLEMENTARY NOTES ON AMERICAN MENISPERMACEAE XVI

NEOTROPICAL TRICLISIEAE AND ANOMOSPERMEAE

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The extensive explorations of lowland forests in Neotropics by Missouri Botanical Garden in Venezuela and Chocó (Colombia) and by New York Botanical Garden in Brazil in cooperation with respective governments, and local institutions, also in Ecuador and in French Guiana yielded 95 new collections. These added to our knowledge of several species. Extensions of ranges were noted for nine but ^{no} new species were described. Due to the extreme difficulties of collecting flowers, which are very small, by now we have accumulated ten species and four subspecies which are probably new but cannot be described because of insufficient material. In order to facilitate their collections, the localities of their collections are listed below. By now it is evident that Chocó in Colombia and tropical lowland forests in Venezuela are very rich in species of this family.

I. Chondrodendron Ruiz & Pavón, Syst. Veg. 261. 1798.

1. Chondrodendron tomentosum Ruiz & Pavón, Syst. Veg. 261. 1798.

Peru: Loreto: Nanay, Ll. Williams 19003; San Martín: T. Plowman 7494 (F), 7495 (F); Huanuco: T. Plowman 7576 (F), Huallaga valley, Rio Soza, E. Vogel s.n. (Sept. 10, 1946) (F). Ecuador: Napo: M. T. Madiaon 5353, 5355 (F), 5412 (F), 5413 (F), 5437 (F).

3. Chondrodendron microphyllum (Eichler) Moldenke in Krukoff & Moldenke, Brittonia. 3: 11. 1938.

Brazil: Bahia: Scott Mori et al. 11341 and Romeu Belem 3502 (mun. Marau), A. Euponino 397 (mun. Santa Cruz de Cabralo).

II. Curarea Barneby & Krukoff, Mem. N.Y. Bot. Gard. 22 (2): 7. 1971.

1. Curarea toxicofera (Weddell) Barneby & Krukoff, Mem. N.Y. Bot. Gard. 22 (2): 9. 1971.

Venezuela: Terr. Fed. Amazonas, T. Plowman 7712. Peru: Loreto: Maynas, A. Gentry et al 21624 (MO) and Juan Revilla 2566

(MO); San Martin: T. Plowman 7439 (F). Ecuador: Napo: Limococha, + 240 m, M. D. Madison 5356, 5357.

This is the first record of the species from Ecuador.

III. Sciadotenia Miers, Ann. Nat. Hist. II, 7: 43. 1851.

1. Sciadotenia cayennensis Benth, Jour. Linn. Soc. Bot. 5 (Suppl. 2): 51, 1861.

French Guiana: M. F. Prevost 221. Brazil Para: Cuiaba-Santarem Road, G. Prance 25510 (MG).

4. Sciadotenia paraensis (Eichler) Diels in Engler, Pflanzenreich 4 (94): 86, 1910.

Brazil; Rondonia: M. G. Silva 4117.

This is the first record for the species from Rondonia.

7. Sciadotenia sprucei Diels in Engler, Pflanzenreich 4 (94): 84, 1910.

Venezuela: Terr. Fed. Amazonas: R. L. Liesner 7115.

9. Sciadotenia brachypoda Diels in Engler, Pflanzenreich 4 (94): 84, 1910.

Brazil: Para: G. T. Prance 25705 (MG).

This is the first record of the species from Para.

V. Telitoxicum Moldenke in Krukoff & Moldenke, Brittonia 3: 42. 1938.

1. Telitoxicum minutiflorum (Diels) Moldenke in Krukoff & Moldenke, Brittonia. 3: 49. 1938.

Brazil: Amazonas: Rio Negro, M. R. Santos 104.

8. Telitoxicum rodriguesii Krukoff, Phytologia 33: 329. 1976.

Brazil: Amazonas: Manaus-Itacoatiara Road, km 26, Reserva Florestal Ducke, J. Aluisio s.n. (02/09-1976) (INPA), (20/10-1976) (INPA).

VI. Abuta Barrere ex Aublet, Pl. Guian. 1: 618. Pl. 250. 1775.

1. Abuta rufescens Aublet, Hist. Pl. Guian. 1. 618, pl. 250. 1775.

French Guiana: Cabassou, M. F. Prevost 684. Venezuela: Bolivar: SE of Icabaru, J. Steyermark 117774. Brazil: Pará: Serra dos Carajás, A. S. Silva AS 58 (MG).

4. Abuta grisebachii Triana & Planchon, Ann. Sci. Nat. IV, 17: 47. 1862.

French Guiana: Cabassu, Fournet A. F. 56. Venezuela: Terr. Fed. Amazonas, Paul E. Barry 2186 (MO).

5. Abuta candollei Triana & Planchon, Ann. Sci. Nat. IV, 17: 47. 1862,

Brazil: Amazonas: Manaus-Itacoatiara Road, J. Aluisio s.n. (23/07-1976) (INPA).

11. Abuta barbata Miers, Contr. Bot. 3: 83. 1871.

French Guiana: Grenand 1453b.

13. Abuta imene (Martius) Eichler, Flora 47: 389. 1864.

Venezuela: Bolivar: Grand Savana, J. Steyermark 115561, 115562.

16. Abuta solimoensis Krukoff & Barneby, Mem. NY Bot. Gard. 20(2): 18. 1970.

Peru: Loreto: Maynas, A. Gentry 21984, 22405, C. Diaz S. 231.

17. Abuta velutina Gleason, Bull. Torrey Club 58: 361. 1931.

Venezuela: Bolivar: SE of Icabaru, J. Steyermark 117773.

This is the first record of the species from Bolivar.

18. Abuta obovata Diels, Notizbl. Bot. Gard. Berlin 13: 29. 1936.

French Guiana: Cabassou, M. F. Prevost 679. Venezuela: Bolivar: J. Steyermark 115546, 117644.

This is the first record of the species from French Guiana.

21. Abuta sandwithiana Krukoff & Barneby, Mem. NY Bot. Gard. 20(2): 18. 1970.

Brazil: Mato Grosso: Aripuana, M. G. Silva 4216 (MG), J. M. Ayres 02 (MG).

27. Abuta grandifolia (Martius) Sandwith, Kew Bull. 1937: 397. 1937.

French Guiana: Grenand 1530. Venezuela: Bolivar: R. Liesner 5555, 5607, 5836. Brazil: Roraima: near Maraça, J. L. de Sousa 265 (INPA); Para: J. M. Pires 16091, C. D. A. Mota s.n. (01/07-1971) (INPA), Rio Trombetus, A. C. Silva AS-118 (MG), 4604 (MG), Rio Tocantins, A. C. Silva AS 171 (MG), 3481 (MG), Altamira-Itaituba Road, C. C. Berg 764 (MG), Santarem, K. Vilhena 351 (MG), Serra dos Carajas, C. C. Berg 559 (MG); Amazonas: Manaus, L. F. Coelho 616 (INPA), Manaus-Itacuatilara Road, J. Aluisio s.n., (29/07-1976) (INPA), Labrea, C. D. A. Mota s.n. (1/07-1976) (MG); Matto Grosso: G. T. Prance 26120 (Acurizal), A. A. Maciel 115 (INPA) (Rio Corixão).

30. Abuta longa Krukoff & Barneby, Mem. NY Bot. Gard. 20 (2): 21. 1970.

Venezuela: Miranda: Angel C. Gonzalez 804 (Paéz), J. Steyermark 116844 (Cerros del Bachiller).

VIII. Anomospermum Miers, Ann. Nat. Hist. III, 14: 101. 1864.

1. Anomospermum grandifolium Eichler, Flora 47: 388. 1864.

Colombia: Santander: Magdalena valley, + 300 m, A. Gentry 20073 (MO). Peru: Loreto: Maynas, A. Gentry 21124 (MO).

- 4b. Anomospermum chloranthum Diels spp. confusum Krukoff & Barneby, Mem. NY Bot. Gard. 22 (2): 69. 1971.

Ecuador: Napo: frontier with Peru, A. Gentry 22067.

- 4d. Anomospermum chloranthum Diels ssp. pacificum Krukoff & Barneby, Mem. NY Bot. Gard. 22 (2): 70. 1971.

Ecuador: Los Rios: 150-200 m, C. H. Dodson 6309 (SEL), 6504. 6514 (SEL), 6622 (SEL), 6729 (SEL); M. T. Madison 5216 (SEL).

These specimens are sterile and they may belong to A. chloranthum ssp. asplundii Krukoff & Barneby.

- 5a. Anomospermum reticulatum (Martius) Eichler ssp. reticulatum Mem. NY Bot. Gard. 22 (2): 73. 1971.

Venezuela: Terr. Fed. Delta Amacuro, J. Steyermark 114674. Peru: Loreto: A. Gentry et al 21280, 22466.

The sterile NY sheet was cited through error as Orthomene

schomburgkii. The specimen at MO has a fruit and it obviously belongs here.

This is the first record of this subspecies from Delta Amacuro.

- 5b. Anomospermum reticulatum (Martius) Eichler ssp. dielsianum (Moldenke) Krukoff & Barneby, 22 (2): 74. 1971.

Brazil: Rondonia: J. U. Santos 191 (MG).

This is the first record of this subspecies from Rondonia.

- 5g. Anomospermum reticulatum (Martius) Eichler ssp. allenii Krukoff & Barneby, Mem. NY Bot. Gard. 22 (2): 77. 1971.

Colombia: Chocó: Lloró-Yuto, A. Gentry 24374, 24379, 23754.

IX. Orthomene Barneby & Krukoff, Mem. NY Bot. Gard. 22 (2): 79. 1971.

1. Orthomene schomburgkii (Miers) Barneby & Krukoff, Mem. NY Bot. Gard. 22 (2): 80. 1971.

Colombia: Chocó: Rio San Juan, E. Forero 4426. Peru: San Martín: J. Schunke V. 5988, 6070, 6092. Brazil: Pará: Itaituba, M. G. Silva 3790 (MG); Amazonas: O. C. Nascimento 828 (MG). Mato Grosso: J. M. Pires 16647 (MG).

Species not described because of absence of sufficient material.

Ten species and four subspecies are left undescribed because of lack of fertile or sufficient material. In order to facilitate their collection, the known localities are listed here.

18. Sciadotenia sp.

Peru: Loreto: down river from Yurimaguas.

Mathias & Taylor 3933 (o with inflorescence - axes, carpophores but no drupes) (see Mem, NYBGard. 22: 25. 1971).

19. Sciadotenia sp.

Brazil: Pará: Serra do Cachimbo, Cuiabá - Santarem highway, km. 1300, terra firme, Prance 25705 (sterile) (see Phytologia 39: 285. 1978).

20. Sciadotenia sp.

Ecuador: Napo: Rio Pucino (first major tributary of Rio Aguatico) + 250 m, A. Gentry 9748 (sterile).

This is the second species of the genus so far found in Ecuador, the first being S. toxifera.

31. Abuta sp.

Brazil: basin of Rio Negro, Maturaca on Rio Gauaburi, R. E. Schultes 24577 (INPA) (sterile) (See Mem. NYBGard. 22: 52. 1971).

32. Abuta sp.

Colombia: Choco: Gentry & Forero 7203 (MO-NY) - hills behind Bahia Solano (Puerto Mutis) alt. 0-250 m, tropical wet forest (see Phytologia 33: 333. 1976); Gentry & Fallen 17731 - Rio San Juan, just below Tado, + 100 m (see Phytologia 39: 289. 1978). Both collections are sterile.

33. Abuta sp.

Colombia: Choco: vicinity of Unguia, + 50 m, Gentry 16723 (NY) (sterile) (see Phytologia 39: 289. 1978).

34. Abuta sp.

Peru: Loreto: Rio Corrientes (near Ecuadorian border, 280-300 m, Gentry 18964 (MO).

35. Abuta sp.

Panama: Canal Zone: 4 m N of Gamboa, Gentry 3243 (MO).

5. Caryomene grandifolia Barneby & Krukoff, Phytologia 41: 247. 1979.

Until flowering collection became available, it has been referred to as 5. Caryomene sp. - see Mem. NYBGard. 22: 60. 1971.

6. Caryomene sp.

Surinam: Brokopongo Dct.: 8 km of village Brownsweg, Van Donselaar 2211 (U, NY-fragment) (sterile) (see Mem. NYBGard. 22: 61. 1971).

77. Caryomene sp.

French Guiana: Saul, M. Fournet 25 (frts collected on the ground).

Fournet states on the label: "a vine 40-50 cm in diam." This is the first record of this genus from French Guiana.

4g. Anomospermum chloranthum Diels ssp. (?)

Ecuador: Carchi: Penas Blancas, 900-1000 m, M. T. Madison 4622 (SEL) (sterile) (base cordate).

5d. Anomospermum reticulatum (Martius) Eichler ssp. idroboi Krukoff & Barneby.

Until specimens in flower and fruit became available it has been referred to as 9. Anomospermum sp.

5h. Anomospermum reticulatum (Martius) Eichler, ssp (2)

Peru: Huanuco: southwestern slope of the Rio Llulla Pichis watershed, on the ascent of Cerros del Sira (in rain forest, + 1290 m), Frank Wolfe 12339 (F), 12340 (F). (Both collections are sterile) (see Phytologia 25: 44. 1972).

5i. Anomospermum reticulatum (Martius) Eichler, ssp. (2)

Venezuela: Terr. Fed. Delta Amacuro, J. Steyermark 114777.

5j. Anomospermum reticulatum (Martius) Eichler ssp. (2)

Ecuador: Esmeraldas: Lita, M. T. Madison 5222.

8. Anomospermum andersoni Krukoff, Phytologia 39: 290. 1978.

Until fruiting specimen became available it has been referred to as 8. Anonomospermuim sp. (see Mem. NYBGard. 22: 78. 1971).

9. See under 5d.

10. Anomospermum sp.

Colombia: Valle: Costa del Pacifico, Rio Cajambre, silva. alt. 5-80 m, Cuatrecasas 17528 (F) (sterile), (see Phytologia: 33: 335. 1976).

Bibliography

In order to conserve space, I am citing only the papers which are not cited in Supplements VII - XIV.

1. Krukoff, B. A. and R. C. Barneby. Supplementary notes on American *Menispermaceae* XIV. *Phytologia* 39: 239-255. 1978.
2. Krukoff, B. A. and R. C. Barneby. Supplementary notes on American *Menispermaceae* XV. *Phytologia* 44: 11-18. 1979.

List of Exsiccatae

The first list of Exsiccatae covering papers on Meniapermaceae including Supplement VIII was published in Mem. NY Bot. Gard 22: 1-89. 1971, the second list covering Supplements IX, X, and XI in Phytologia 33: 337-340. 1976, the third covering Supplements XII and XIII in Phytologia 39: 292-293. 1978, the fourth list covering Supplement XIV in Phytologia 41: 254-255. 1979 and the fifth list covering Supplement XV in Phytologia 44: 17-18. 1979. This list covers Supplement XVI. The number in parenthesis corresponds with the species - number of this and other papers (Supplements XIII to XV). Only numbered collections and those of which the dates of collection are recorded have been listed. If a collector gathered his collection together with others, only his name is cited in this list. Collections with Dr. Prance's numbers are cited under Prance.

- Aluisio, J., s.n. (23/07-1976) (A-5), (29/07-1976) (A-27), (02/09-1976) (T-8), (20/10-1976) (T-8)
- Ayres, J. M., 02 (A-21)
- Belem, Romeu P., 35 02 (CH-3)
- Berg, C. C., 559 (A-27), 764 (A-27)
- Berry, Paul E., 2186 (A-4)
- Coelho, L. F., 616 (A-27)
- Diaz, C., S., 231 (A-16)
- Dodaon, C. H., 6309 (AN-4), 6504 (AN-4), 6514 (AN-4), 6622 (AN-4), 6729 (AN-4)
- Euponino, A., 397 (CH-3)
- Forero, E., 4426 (O-1)
- Foster, Robin B., 3239 (A-27), 3817 (A-27), 3864 (O-1), 5289 (CH-1), 6480 (CU-1), 6141 (AN-1), 6178 (CH-1)
- Fournet, A. F., 56 (A-4)
- Gentry, A., 3243 (A-34), 9748 (S-19), 20073 (AN-1), 21124 (AN-1), 21280 (AN-5a), 21624 (CU-1), 21984 (A-16), 22067 (AN-4b), 22405 (A-16), 22466 (AN-5a), 23754 (AN-5g), 24374 (AN-5g), 24379 (AN-5g)
- Gonzalez, Angel C., 804 (A-30)
- Grenand, 1453b (A-11), 1530 (A-27)
- Liesner, Ronald, 5555 (A-27), 5607 (A-27), 5836 (A-27), 7115 (S-7)
- Maciel, A. A., 115 (A-27)
- Madison, M. T., 4622 (AN-4), 5216 (AN-4), 5222 (AN)-5 spp. (?), 5353 (CH-1), 5355 (CH-1), 5356 (CU-1), 5357 (CU-1), 5412 (CH-1), 5413 (CH-1), 5437 (CH-1)

- Mori, S. A., 11341 (CH-3)
Mota, C. D. A., s.n. (1-07-76) (A-27), (01-07-77) (A-27)
- Nascimento, O. C., 828 (O-1)
- Pires, J. M., 16091 (A-27), 16647 (O-1)
Plowman, T., 7439 (CU-1), 7494 (CH-1), 7495 (CH-1), 7576 (CH-1),
7712 (CU-1)
Prance, G. T., 25510 (S-1), 25705 (S-9), 26120 (A-27)
Prevost, M. F., 221 (S-1), 679 (A-18), 684 (A-1)
- Revilla, Juan, 2566 (CU-1)
- Santos, M. R., 104 (T-1), 191 (AN-5b)
Schunke V., J., 5988 (O-1), 6070 (O-1), 6092 (O-1)
Silva, A. S., AS-58 (A-1), AS-118 (A-27), AS-171 (A-27)
Silva, M. G., 3481 (A-27), 3790 (O-1), 4117 (S-4), 4216 (A-21)
Silva, N. T., 4604 (A-27)
Souza de, J. L., 265 (A-27)
Steyermark, J., 114674 (AN-5a), 114777 (AN-5-ssp. (?)), 115546 (A-18),
115561 (A-13), 115562 (A-13), 116844 (A-30), 117644 (A-18),
117773 (A-17), 117774 (A-1)
- Vilhena, R., 351 (A-27)
Vogel, ., s.n. (9-10-46) (CH-1)
- William, Ll., 19003 (CH-1)